PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Examiner: Daniel S. Metzmaier
	)	
Marder et al.	)	Art Unit: 1712
	)	
Serial No.: 09/918,874	)	Confirmation No.: 3252
	)	
Filed: July 30, 2001	)	
	)	
For: TWO PHOTON OR HIGHER-ORDER ABSORBING OPTICAL MATERIALS AND METHODS OF USE	)	
	)	

Mail Stop RCE
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. 1.132

I, Nils Kröger, hereby declare:

1. I received a Bachelor of Science degree in Chemistry from Philipps University of Marburg, Germany.

2. In 1995, I received my Doctor of Philosophy degree in Biochemistry from the University of Regensburg, Germany. I also received a Master of Science degree from the University of Regensburg.

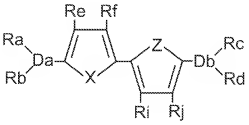
3. Currently, I am an Assistant Professor in the School of Materials Science and Engineering in a jointly held position with the School of Chemistry and Biochemistry at the Georgia Institute of Technology.

4. I have published multiple peer reviewed papers involving chemical synthesis during my years of scientific research. I consider myself a person of skill in the chemical arts.

5. I have reviewed the Office Action of July 10, 2008 in this matter, as well as the claims and relevant pages from the application. I understand that certain terms in the claims have been alleged to be indefinite to one of skill in the art. I understand that indefiniteness in this context means that one of skill in the art could not interpret the claim terms in light of the teachings in the application and knowledge in the art.

6. I understand that the invention has been rejected for allegedly being indefinite based on the assertion that a person of skill in the art cannot locate the pi bridge in the structures recited in claims 16, 17 and 18 when m, n and o are zero.

7. Where m, n and o are simultaneously zero, the structures of the three claims are identical (see Figure below), and consist only of the donor groups and pi-bridges.



The pi-bridges consist of the unsaturated conjugated bonds in the "X" and "Z" rings linking the donor groups Da and Db. Therefore, I can discern the meaning of this claim term.

8. I further understand that the above-referenced invention has been rejected for allegedly being indefinite based on the assertion that one of skill in the art would not know "what an amino acid is reacted to form said functional group" regarding groups $R_{e\text{-}m}$, $R_{a1\text{-}a3}$, $R_{b1\text{-}b3}$ and $R_{g1\text{-}g3}$ in claims 16-18.

9. I have reviewed the material at pages 18-19 of the application discussing derivatization of the chromophores described in the application. I have also reviewed the relevant examples depicting synthesis of chromophores with available functional groups for derivatization, and the subsequent reaction of such chromophores with an amino acid (lysine, Example 34) and with biotin through a polyamide linkage formed from

aminohexanoic acid (Example 46). The application describes the use of functional groups including hydroxyl, cyano and amine groups to react with amine or hydroxyl groups or with carboxylic acids or aldehydes, among others.

10. Following the teachings in the application, I am able to discern the meaning of what an amino acid is and how to attach an amino acid to the claimed chromophores to thereby incorporate additional functional groups to the chromophores. This is described in the application, particularly at page 19 and in the examples.

11. I understand that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements and the like may jeopardize the validity of the application or document or any resulting patent. I declare that all statements in this declaration that are based on my own knowledge are true, and all statements made on information and belief are believed to be true.

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Nils Kröger, Ph.D. Date